

**Work Order ID 52137**

Thursday, September 17, 2009 8:07:51 AM

Page 1

Item ID: D209-669-013

Accept

Revision ID: B

Item Name: Skidtube LH

Start Date: 9/18/2009 Start Qty: 1.00

Required Date: 10/9/2009 Req'd Qty: 1.00

Reference:

Approvals:

Process Plan:

Date: 09-17

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run

Start

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D209-669-013

Rev B

DSI 9450

Rev A

100

0.00



DC

DOCUMENT CONTROL

Memo

0.00

Document Control

Photocopy bluefile &amp; type labels per PPP d209-669-013 CHG003

509/10/05

110

0.00



Packaging

Pick Kit

Memo

0.00

Packaging

10/9/10/01 (11)

52124

**Work Order ID 52137**

Thursday, September 17, 2009 8:07:51 AM

Page 2

Item ID: D209-669-013

Revision ID: B

Item Name: Skidtube LH

Start Date: 9/18/2009 Start Qty: 1.00

Required Date: 10/9/2009 Req'd Qty: 1.00

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

120



QC

Quality Control

QC4- 100% Inspect kits for completeness

0.00

2) Sur/d0/05

0.00

Memo

130



Packaging

Packaging

Packaging

0.00

0.00

Memo

Identify and pack for shipping as per PPPD209-669-013

Location:

140



QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

0.00

Memo

MF  
09-10-05

# Picklist Print

Thursday, September 17, 2009 8:08:05 AM

Page 1

10

Work Order ID: 52137



Parent Item: D209-669-013RevB



Parent Item Name: Skidtube LH

Start Date: 9/18/2009

Required Date: 10/9/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D209-669-043RevB		Manufactured	No			110	Each	3.0000	1.0000			
										52124		CU
Replacement Skidtube												

Warehouse  
Location

Loc Qty

Loc Code

Premier

Mezz

3

22797

1

39205

1

39206

1

S D2917-1RevB

Manufactured

No



110

Each

0.0000

2.0000



52126

PC 9/10/08

Saddle LH

S D2918-1RevB

Manufactured

No



110

Each

3.0000

2.0000



B52131 9/10/05 54 (E)

Saddle LH

Warehouse  
Location

Loc Qty

Loc Code

Main Warehouse

ST

3

43755

1

51329

2

43755 10

1

# Picklist Print

Thursday, September 17, 2009 8:08:05 AM

Work Order ID: 52137



Parent Item: D209-669-013RevB



Parent Item Name: Skidtube LH

Start Date: 9/18/2009

Required Date: 10/9/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
AN4-51A  Bolt		Purchased	No			110	Each	354.0000	8.0000	✓		

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

354

110328

2

111635

102

112314

100

112489

100

112641

50

m/112314

D2570RevB

Manufactured No



Bushing

110

Each

139.0000

24.0000



52214

PC9/10/09 (1)

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

15

47246

15

Main Warehouse

ST36

124

50356

124

# Picklist Print

Thursday, September 17, 2009 8:08:05 AM

Work Order ID: 52137

Parent Item: D209-669-013RevB

Parent Item Name: Skidtube LH



Comments:

Start Date: 9/18/2009

Required Date: 10/9/2009

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
MS21042L4		Purchased	No			110	Each	8,148.000	24.0000	✓		
												
Nut												

Warehouse                      Loc Qty                      Loc Code  
Location

Main Warehouse

ST	8148
107499	5
108145	4
110450	1
110507	184
111827	5996
112314	1893
15924	0
7690	24
8182	41

M112314

AN5-36A

Purchased

No

110

Each

555.0000

4.0000

Bolt

Warehouse                      Loc Qty                      Loc Code  
Location

Main Warehouse

ST	555
109545	11
110467	7
110731	4
112243	20
112314	463
112385	50

M112314

# Picklist Print

Page 4

Thursday, September 17, 2009 8:08:05 AM

Work Order ID: 52137



Parent Item: D209-669-013RevB



Parent Item Name: Skidtube LH

Start Date: 9/18/2009

Required Date: 10/9/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
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AN960JD516

Purchased

No

110

Each

1,097.000

8.0000



Washer



✓ M112794

*[Signature]*

## Warehouse

## Loc Qty

## Loc Code

### Location

Main Warehouse

ST

1097

100564

2

106167

6

107534

34

107959

43

108246

46

108672

2

109059

49

109752

22

110363

46

110523

57

111279

43

112082

247

112314

500

MS21042L5

Purchased

No

110

Each

1,279.000

4.0000



Nut



✓ *[Signature]* 9/17/09

## Warehouse

## Loc Qty

## Loc Code

### Location

Main Warehouse

ST

1279

110382

10

111636

269

112314

1000

M111636

Thursday, September 17, 2009 8:08:05 AM

Shop Packet Print

Page 4

# Picklist Print

Page 5

Thursday, September 17, 2009 8:08:05 AM

Work Order ID: 52137



Parent Item: D209-669-013RevB



Parent Item Name: Skidtube LH

Start Date: 9/18/2009

Required Date: 10/9/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

AN4-7A		Purchased	No			110	Each	201.0000	16.0000			
--------	--	-----------	----	--	--	-----	------	----------	---------	--	--	--



Bolt



M112720 P4/10/01 (1)

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

201

111668

1

112314

50

112385

50

112641

100

Thursday, September 17, 2009 8:08:05 AM

Shop Packet Print

Page 5

# Picklist Print

Page 6

Thursday, September 17, 2009 8:08:05 AM

Work Order ID: 52137



Parent Item: D209-669-013RevB



Parent Item Name: Skidtube LH

Start Date: 9/18/2009

Required Date: 10/9/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
AN960JD416  Washer		Purchased	No			110	Each	8,313.000	32.0000 ✓			

Warehouse                      Loc Qty                      Loc Code  
Location

Main Warehouse

ST	8313	
102929	2	
105906	4	
106277	2	
107321	23	
107939	114	
108161	553	
108827	31	
109249	69	
110523	340	
111279	101	
111916	2187	M111916
112314	4887	
16941	0	

D2929RevB

Manufactured No



Spacer

110 Each 15.0000 2.0000 ✓



52243

9/14/01 (1)

Warehouse                      Loc Qty                      Loc Code  
Location

Main Warehouse

ST	15	
43376	15	

Thursday, September 17, 2009 8:08:05 AM

Shop Packet Print

Page 6



# Picklist Print

Page 7

Thursday, September 17, 2009 8:08:05 AM

Work Order ID: 52137



Parent Item: D209-669-013RevB



Parent Item Name: Skidtube LH

Start Date: 9/18/2009

Required Date: 10/9/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

D2930RevB Spacer		Manufactured	No			110	Each	11.0000	2.0000	✓		
---------------------	--	--------------	----	--	--	-----	------	---------	--------	---	--	--

Warehouse                      Loc Qty                      Loc Code  
Location

Main Warehouse

ST

11

43378

11

D3405-041RevB Lug Assembly		Manufactured	No			110	Each	10.0000	1.0000			
-------------------------------	--	--------------	----	--	--	-----	------	---------	--------	--	--	--

Warehouse                      Loc Qty                      Loc Code  
Location

Main Warehouse

ST

10

51254

10

AN4C47A Bolt		Purchased	No			110	Each	222.0000	4.0000	✓		
-----------------	--	-----------	----	--	--	-----	------	----------	--------	---	--	--

Warehouse                      Loc Qty                      Loc Code  
Location

Main Warehouse

ST

222

110847

4

112431

18

112489

100

112641

100

Thursday, September 17, 2009 8:08:05 AM

Shop Packet Print

Page 7

# Picklist Print

Thursday, September 17, 2009 8:08:05 AM

Work Order ID: 52137

Parent Item: D209-669-013RevB

Parent Item Name: Skidtube LH


Comments:

Start Date: 9/18/2009

Required Date: 10/9/2009

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
MS21043-4 S  Nut		Purchased	No			110	Each	1,397.000	5.0000			

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
OFFSHORE		
FG	40	
104603	40	
Main Warehouse		
ST	1357	
111819	35	
112243	22	
112314	1000	
112492	300	

D3405-043RevB

Manufactured

No

110

Each

12.0000

1.0000



Lug Assembly

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	12	
46589	1	
46863	1	
51255	10	

# Picklist Print

Page 9

Thursday, September 17, 2009 8:08:05 AM

Work Order ID: 52137



Parent Item: D209-669-013RevB



Parent Item Name: Skidtube LH

Start Date: 9/18/2009

Required Date: 10/9/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3407-041RevE		Manufactured	No			110	Each	35.0000	1.0000	✓		

S



*Handwritten signature*

Tow Ring

Warehouse Loc Qty Loc Code

Location

OFFSHORE

FG

3

35780

3

Main Warehouse

ST

1

48356

1

Main Warehouse

ST464

31

51659

31

51659

D3456-1RevA

Manufactured No

110

Each

232.0000

1.0000

✓

S



*Handwritten signature and date 9/19/09*

Washer

Warehouse Loc Qty Loc Code

Location

OFFSHORE

FG

7

25701

7

Main Warehouse

ST

225

46752

25

51653

200

46752

Thursday, September 17, 2009 8:08:05 AM

Shop Packet Print

Page 9

# Picklist Print

Page 10

Thursday, September 17, 2009 8:08:05 AM

Work Order ID: 52137



Parent Item: D209-669-013RevB



Parent Item Name: Skidtube LH

Start Date: 9/18/2009

Required Date: 10/9/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3417-5RevE Washer		Manufactured	No			110	Each	152.0000	2.0000 ✓			

*Signature*

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

152

51649

152

51649

# **DART SERVICE INSTRUCTION**

TO AMEND INSTALLATION INSTRUCTIONS IIN-D209-669 REV. B

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 50137

## **INSTRUCTIONS:**

1) FOR D209-669-011/-012/-013/-014 SKID TUBES @ CHANGE 003 AND SUBSEQUENT, MODIFY THE FOLLOWING:

- a) REPLACE THE D2968-041 TOW RING WITH THE D3407-041 TOW RING ASSEMBLY.
- b) REPLACE THE D2736-1 AND D2736-3 GHW LUGS WITH THE D3405-041 AND D3405-043 LUG ASSEMBLIES.
- c) AMEND THE PARTS LIST IN SECTION 5.0 OF INSTALLATION INSTRUCTIONS IIN-D209-669 REV. B AS SHOWN ON PAGE 2 OF THIS DSI.

NOTE: ALL INSTALLATION FASTENERS FOR THE ABOVE CHANGES HAVE BEEN UPDATED. SEE THE AMENDED PARTS LIST ON PAGE 2 FOR DETAILS.

A	NEW ISSUE	AJS	09.02.24
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9450	SHEET 1 OF 3
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	SKIDTUBE INSTALLATIONS	NTS
DATE	09.02.24	COPYRIGHT © 2009 BY DART AEROSPACE LTD <small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD</small>	

# 5.0 PARTS LIST

52137

ITEM	QTY -011	QTY -012	QTY -013	QTY -014	QTY -041	QTY -043	PART NUMBER	DESCRIPTION
	X						D209-669-011	SKIDTUBE INSTALLATION, LH (AH-1W/J)
		X					D209-669-012	SKIDTUBE INSTALLATION, RH (AH-1W/J)
			X				D209-669-013	SKIDTUBE INSTALLATION, LH (AH-1P/F/S)
				X			D209-669-014	SKIDTUBE INSTALLATION, RH (AH-1P/F/S)
	1	1			X		D209-669-041	REPLACEMENT SKIDTUBE (AH-1W/J)
			1	1		X	D209-669-043	REPLACEMENT SKIDTUBE (AH-1P/F/S)

IS:

50	4	4	1	1			D3405-041	LUG ASSEMBLY
51	8	8	4	4			AN4C47A	BOLT
52	16	16	8	8			D2570	BUSHING
53	8	8	4	4			MS21043-4	NUT
54			1	1			D3405-043	LUG ASSEMBLY
60	1	1	1	1			D3407-041	TOW RING ASSEMBLY
61	1	1	1	1			D3456-1	WASHER
62	1	1	1	1			MS21043-4	NUT
63	2	2	2	2			D3417-5	WASHER

WAS:

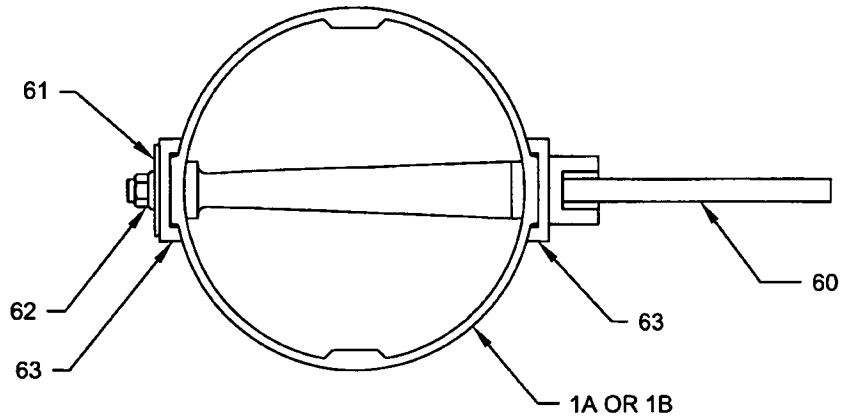
50	4	4	1	1			D2736-1	GHW LUG
51	8	8	4	4			AN4-46A	BOLT
52	16	16	8	8			D2570	BUSHING
53	8	8	4	4			MS21042L4	NUT (OR MS21042-4)
54			1	1			D2736-3	GHW LUG
60	1	1	1	1			D2968-041	TOW RING
61	1	1	1	1			AN970-4	WASHER
62	1	1	1	1			MS21042L4	NUT (OR MS21042-4)

DESIGN	AJS	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9450	SHEET 2 OF 3
APPROVED		TITLE	SCALE
DE APPR.		SKIDTUBE INSTALLATIONS	NTS
DATE	09.02.24	<small>COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT THE WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

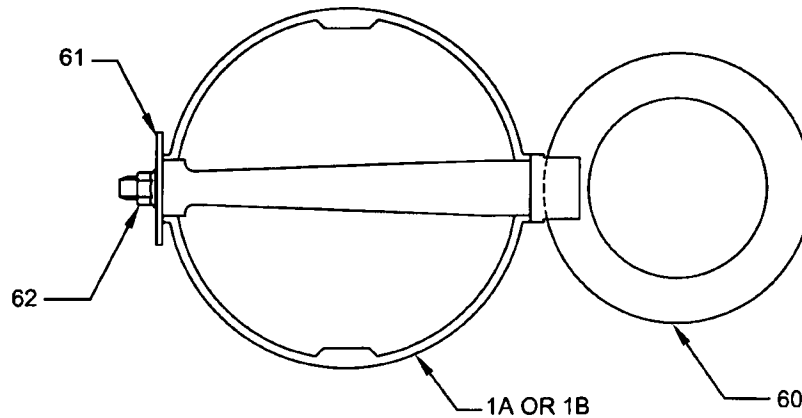
INSTALL TOW RING ASSEMBLY AS SHOWN BELOW (REFER TO SECTION F-F OF IIN-D209-669 REV. B.

52137

**IS:**



**WAS:**



NO PICTORIAL CHANGE REQUIRED FOR GROUND HANDLING WHEEL LUG CHANGES.

DESIGN	AJS	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9450	SHEET 3 OF 3
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	SKIDTUBE INSTALLATIONS	NTS
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